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Applicant: Walter Callen et al. Attorney Docket No.: 564462001613

Serial No.: 10/034,621 Filed: December 21, 2001

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REMARKS

Interview of April 25, 2006

Applicants thank the Examiner for the very courteous and helpful telephonic interview of April 25, 2006, and discussing the pending claims and the advisory action of February 23, 2006. The Examiner noted he would consider a second "after final" submission that only further canceled claims specifically objected to in the advisory action of February 23, 2006, to help place the case in condition for allowance (in addition to re-submitting the amendments of the first "after final" of January 27, 2006, which were not entered).

Status of the Claims

Pending claims

Claims 1 to 7, 9 to 12, 16, 17 and 28 to 55 are pending. Claims 34, 35, 38 and 44 have been withdrawn. Thus, claims 1 to 7, 9 to 12, 16, 17, 28 to 33, 36, 37, 39 to 43, and 45 to 55 are pending and under consideration.

Canceled claims

Claims 4 to 6, 9, 10, 12, 17, 45, 50, 53 and 54 are canceled without prejudice or disclaimer. Thus, after entry of this amendment, claims 1 to 3, 7, 11, 16, 28 to 33, 36, 37, 39 to 43, 46 to 49, 51, 52 and 55 will be pending and under consideration.

Allowed claim

Applicants thank the Examiner for finding claim 16 allowable.

Outstanding Rejections

The rejection of claims 16 and 50 to 54 under 35 U.S.C. §112, second paragraph, is maintained. The rejection of claim 17 and claims 50 to 54 under 35 U.S.C. §112, first paragraph, as allegedly containing subject matter not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors at the time the application was filed had possession of the invention (written description requirement) is maintained. The rejection of claims 1 to 7, 9 to 12, 17, 28 to 33, 36, 37 and 45 to 55 under 35 U.S.C. §112, first paragraph, as allegedly not described in the specification in such a way as to enable one skilled in the art to which it pertains to make and/or use the invention (enablement requirement) is

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maintained.

Applicants respectfully traverse all outstanding objections to the specification and rejection of the claims.

Support for the Claim Amendments

The specification sets forth an extensive description of the invention in the amended claims in this and previous responses. For example, support for nucleic acids having various sequence identities to the exemplary sequences of the invention can be found, inter alia, in paragraphs [0173] and [0174], of U.S. Patent publication no. 20020132997. Support for nucleic acids that hybridize to exemplary sequences of the invention under highly stringent conditions can be found, inter alia, in paragraphs, [0066] and [0163] to [0172] of U.S. Patent publication no. 20020132997. Accordingly, Applicants submit that no new matter has been introduced and the instant amendment can be properly entered.

Applicants respectfully request entry of the amendments set forth in this response under 37 CFR §1.116. The amendment places the case in condition for allowance and places the case in better condition for appeal; the amendment does not raise any issues of new matter; and, the amended claims do not present new issues requiring further consideration or search.

Advisory Action of February 23, 2006

In response to the advisory action of February 23, 2006 (the AA), Applicants have further canceled claims specifically objected to in the AA to help place the case in condition for allowance (in addition to re-submitting the amendments of the first "after final" of January 27, 2006, which were not entered). Specifically, because claims 4 and 53 (the terms "highly stringent" and 68°C were objected to), claim 5 (the phrase "for 15 or 30 minutes" was objected to), claims 9 and 10 (the terms "97%" and 99% were objected to) and claim 12 (the phrase "polymerase encoding sequence" was objected to) were objected to in the AA for allegedly adding new matter, only to expedite allowance of this application, they are canceled herein, without prejudice or disclaimer.

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Claim Objections

The Patent Office had concerns regarding the grammatical structure of claim 46 (see page 2 of the OA). The instant amendment addresses this issue.

Issues under 35 U.S.C. §112, second paragraph

The rejection of claims 16 and 50 to 54 under 35 U.S.C. §112, second paragraph, is maintained. The Office has concerns regarding the phrase "active site of the polymerase." While Applicants' respectfully traverse, maintaining that one skilled in the art would understand the bounds of a claim encompassing identification of an enzymatic (polymerase) active site when read in light of the specification, the claims are amended to expedite prosecution of this application. The instant amendment addresses this issue.

Issues under 35 U.S.C. §112, first paragraph

Applicants respectfully request consideration of these remarks and reconsideration of Applicants' responses of September 17, 2004, and August 25, 2004.

Written Description

The rejection of claim 17 and claims 50 to 54 under 35 U.S.C. §112, first paragraph, as allegedly containing subject matter not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors at the time the application was filed had possession of the invention (written description requirement) is maintained.

While Applicants respectfully aver that the specification describes the claim limitations sufficiently clearly that one having ordinary skill in the pertinent art would recognize from the disclosure that Applicants invented the claimed subject matter and were in possession of the claimed invention, the claims are amended to expedite prosecution of this application. The instant amendment addresses this issue. After entry of the instant amendment, the pending claims will encompass a genus of polynucleotides having 95% sequence identity to the exemplary SEQ ID NO:1, or a genus of polynucleotides that hybridize under highly stringent conditions to the exemplary SEQ ID NO:1.

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§112, first paragraph.

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Applicants respectfully submit that the amended claims encompassing the claimed

polymerase-encoding nucleic acids meet the written description requirement under 35 U.S.C.

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CONCLUSION

In view of the foregoing amendment and remarks, Applicants respectfully aver that the Examiner can properly withdraw the rejection of the pending claims under 35 U.S.C. §112, first and second paragraphs. The amendment places the case in condition for allowance, does not raise any issues of new matter and the amended claims do not present new issues requiring further consideration or search. Applicants respectfully submit that all claims pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

Applicants believe that no additional fees are necessitated by the present response and amendment. However, in the event any such fees are due, the Commissioner is hereby authorized to charge any such fees to Deposit Account No. 06-1050 referencing docket no. 564462001613. Please credit any overpayment to this account.

After the Examiner has reviewed this after final response and amendment, if the Examiner believes a telephonic interview would help expedite prosecution, please call Applicants' representative at (858) 720-5133.

Dated: April 25, 2006

Respectfully subpotted,

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